

***FlyBy Math™* Alignment**  
**Mathematics Content Standards and Objectives**

**Standard 2: Algebra (MA.S.2)**

Students will:

- demonstrate understanding of patterns, relations, and functions;
- represent and analyze mathematical situations and structures using algebraic symbols;
- use mathematical models to represent and understand quantitative relationships; and
- analyze change in various contexts

through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics.

**Algebra Objectives**

Students will:

MA.6.2.4 use input/output models and spreadsheets to evaluate functions.

***FlyBy Math™* Activities**

--Use tables, graphs, and equations to solve aircraft conflict problems.

MA.6.2.8 locate and plot points within the four segments.

--Plot points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system to describe the motion of two airplanes.

MA.6.2.9 use variables to represent and solve real world problems appropriate for the 6<sup>th</sup> grade using multiple strategies.

--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.

--Use tables, graphs, and equations to solve aircraft conflict problems.

**Standard 4: Measurement (MA.S.4)**

Students will:

- demonstrate understanding of measurable attributes of objects and the units, systems, and processes of measurement; and
- apply appropriate techniques, tools and formulas to determine measurements

through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics.

**Measurement Objectives**

Students will:

MA.6.4.5 select appropriate units and determine length, weight/mass and capacity/volume using metric and customary systems.

***FlyBy Math™* Activities**

--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.

## Standard 5: Data Analysis and Probability (MA.S.5)

Students will:

- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them;
- select and use appropriate statistical methods to analyze data;
- develop and evaluate inferences and predictions that are based on models; and
- apply and demonstrate an understanding of basic concepts of probability

through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics.

### Data Analysis and Probability Objectives

Students will:

MA.6.5.1 collect, organize, display, and read data using appropriate graphs and tables.

### *FlyBy Math™* Activities

--Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs.

--Use tables, bar graphs, line graphs, equations, and a Cartesian coordinate system to draw conclusions.